CLAIMS

What is claimed is:

Claim 1. A method of treating a human tumor in a mammal, wherein said tumor expresses an antigen which specifically binds to a monoclonal antibody or antigen binding fragment thereof which has the identifying characteristics of a monoclonal antibody encoded by a clone deposited with the ATCC as accession number PTA-4890, comprising administering to said mammal said monoclonal antibody in an amount effective to reduce said mammal's tumor burden.

Claim 2. The method of claim 1 wherein said antibody is conjugated to a cytotoxic moiety.

Claim 3. The method of claim 2 wherein said cytotoxic moiety is a radioactive isotope.

Claim 4. The method of claim 1 wherein said antibody activates complement.

Claim 5. The method of claim 1 wherein said antibody mediates antibody dependent cellular cytotoxicity.

Claim 6. The method of claim 1 wherein said antibody is a murine antibody.

Claim 7. The method of claim 1 wherein said antibody is a humanized antibody

Claim 8. The method of claim 1 wherein said antibody is a chimerized antibody.

Claim 9. An isolated monoclonal antibody or antigen binding fragments thereof encoded by the clone deposited with the ATCC as accession number PTA-4890.

Claim 10. The isolated antibody or antigen binding fragments of claim 9, wherein said isolated antibody or antigen binding fragments thereof is humanized.

Claim 11. The isolated antibody or antigen binding fragments of claim 9 conjugated with a member selected from the group consisting of cytotoxic moieties, enzymes, radioactive compounds, and hematogenous cells.

Claim 12. The isolated antibody or antigen binding fragments of claim 9, wherein said isolated antibody or antigen binding fragments thereof is a chimerized antibody.

Claim 13. The isolated antibody or antigen binding fragments of claim 9, wherein said isolated antibody or antigen binding fragments thereof is a murine antibody.

Claim 14. The isolated clone deposited with the ATCC as accession number PTA-4890.

Claim 15. A binding assay to determine presence of cancerous cells in a tissue sample selected from a human tumor comprising:

providing a tissue sample from said human tumor ;

providing an isolated monoclonal antibody or antigen binding fragment thereof encoded by the clone deposited with the ATCC as accession number PTA-4890;

contacting said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample; and

determining binding of said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample;

whereby the presence of said cancerous cells in said tissue sample is indicated.

Claim 16. The binding assay of claim 15 wherein the human tumor tissue sample is obtained from a tumor originating in a tissue selected from the group consisting of colon, ovarian, lung, and breast tissue.

Claim 17. A process of isolating or screening for cancerous cells in a tissue sample selected from a human tumor comprising:

providing a tissue sample from a said human tumor ;

providing an isolated monoclonal antibody or antigen binding fragment thereof encoded by the clone deposited with the ATCC as accession number PTA-4890;

contacting said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample; and

determining binding of said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample;

whereby said cancerous cells are isolated by said binding and their presence in said tissue sample is confirmed.

Claim 18. The process of claim 17 wherein the human tumor tissue sample is obtained from a tumor originating in a tissue selected from the group consisting of colon, ovarian, lung, and breast tissue.

Claim 19. A method of treating a human tumor in a mammal, wherein said tumor expresses an antigen which specifically binds to a monoclonal antibody or antigen binding fragment thereof which has the identifying characteristics of a monoclonal antibody encoded by a clone deposited with the ATCC as accession number PTA-4889, comprising administering to said mammal said monoclonal antibody in an amount effective to reduce

said mammal's tumor burden.

Claim 20. The method of claim 19 wherein said antibody is conjugated to a cytotoxic moiety.

Claim 21. The method of claim 20 wherein said cytotoxic moiety is a radioactive isotope.

Claim 22. The method of claim 19 wherein said antibody activates complement.

Claim 23. The method of claim 19 wherein said antibody mediates antibody dependent cellular cytotoxicity.

Claim 24. The method of claim 19 wherein said antibody is a murine antibody.

Claim 25. The method of claim 19 wherein said antibody is a humanized antibody

Claim 26. The method of claim 19 wherein said antibody is a chimerized antibody.

Claim 27. An isolated monoclonal antibody or antigen binding fragments thereof encoded by the clone deposited with the ATCC as accession number PTA-4889.

Claim 28. The isolated antibody or antigen binding fragments of claim 27, wherein said isolated antibody or antigen binding fragments thereof is humanized.

Claim 29. The isolated antibody or antigen binding fragments of claim 27 conjugated with a member selected from the group consisting of cytotoxic moieties, enzymes, radioactive compounds, and hematogenous cells.

Claim 30. The isolated antibody or antigen binding fragments of claim 27, wherein said isolated antibody or antigen binding fragments thereof is a chimerized antibody.

Claim 31. The isolated antibody or antigen binding fragments of claim 27, wherein said isolated antibody or antigen binding fragments thereof is a murine antibody.

Claim 32. The isolated clone deposited with the ATCC as accession number PTA-4889.

Claim 33. A binding assay to determine presence of cancerous cells in a tissue sample selected from a human tumor comprising:

providing a tissue sample from said human tumor ;

providing an isolated monoclonal antibody or antigen binding fragment thereof encoded by the clone deposited with the ATCC as accession number PTA-4889;

contacting said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample; and

determining binding of said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample;

whereby the presence of said cancerous cells in said tissue sample is indicated.

Claim 34. The binding assay of claim 33 wherein the human tumor tissue sample is obtained from a tumor originating in a tissue selected from the group consisting of colon, ovarian, lung, and breast tissue.

Claim 35. A process of isolating or screening for cancerous cells in a tissue sample selected from a human tumor comprising:

providing a tissue sample from a said human tumor ;

providing an isolated monoclonal antibody or antigen binding fragment thereof encoded by the clone deposited with the ATCC as accession number PTA-4889:

contacting said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample; and

determining binding of said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample;

whereby said cancerous cells are isolated by said binding and their presence in said tissue sample is confirmed.

Claim 36. The process of claim 35 wherein the human tumor tissue sample is obtained from a tumor originating in a tissue selected from the group consisting of colon, ovarian, lung, and breast tissue.

Claim 37. A method of treating a human tumor in a mammal, wherein said tumor expresses an antigen which specifically binds to a monoclonal antibody or antigen binding fragment thereof which has the identifying characteristics of a monoclonal antibody encoded by a clone deposited with the ATCC as accession number PTA-5643, comprising administering to said mammal said monoclonal antibody in an amount effective to reduce said mammal's tumor burden.

Claim 38. The method of claim 37 wherein said antibody is conjugated to a cytotoxic moiety.

Claim 39. The method of claim 38 wherein said cytotoxic moiety is a radioactive isotope.

Claim 40. The method of claim 37 wherein said antibody activates complement.

Claim 41. The method of claim 37 wherein said antibody mediates antibody dependent cellular cytotoxicity.

Claim 42. The method of claim 37 wherein said antibody is a murine antibody.

Claim 43. The method of claim 37 wherein said antibody is a humanized antibody

Claim 44. The method of claim 37 wherein said antibody is a chimerized antibody.

Claim 45. An isolated monoclonal antibody or antigen binding fragments thereof encoded by the clone deposited with the ATCC as accession number PTA-5643.

Claim 46. The isolated antibody or antigen binding fragments of claim 45, wherein said isolated antibody or antigen binding fragments thereof is humanized.

Claim 47. The isolated antibody or antigen binding fragments of claim 45 conjugated with a member selected from the group consisting of cytotoxic moieties, enzymes, radioactive compounds, and hematogenous cells.

Claim 48. The isolated antibody or antigen binding fragments of claim 45, wherein said isolated antibody or antigen binding fragments thereof is a chimerized antibody.

Claim 49. The isolated antibody or antigen binding fragments of claim 45, wherein said isolated antibody or antigen binding fragments thereof is a murine antibody.

Claim 50. The isolated clone deposited with the ATCC as accession number PTA-5643.

Claim 51. A binding assay to determine presence of cancerous cells in a tissue sample selected from a human tumor comprising:

providing a tissue sample from said human tumor ;

providing an isolated monoclonal antibody or antigen binding fragment thereof encoded by the clone deposited with the ATCC as accession number PTA-5643;

contacting said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample; and

determining binding of said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample;

whereby the presence of said cancerous cells in said tissue sample is indicated.

Claim 52. The binding assay of claim 51 wherein the human tumor tissue sample is obtained from a tumor originating in a tissue selected from the group consisting of colon, ovarian, lung, and breast tissue.

Claim 53. A process of isolating or screening for cancerous cells in a tissue sample selected from a human tumor comprising:

providing a tissue sample from a said human tumor ;

providing an isolated monoclonal antibody or antigen binding fragment thereof encoded by the clone deposited with the ATCC as accession number PTA-5643:

contacting said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample; and

determining binding of said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample;

whereby said cancerous cells are isolated by said binding and their presence in said tissue sample is confirmed.

Claim 54. The process of claim 53 wherein the human tumor tissue sample is obtained from a tumor originating in a tissue selected from the group consisting of colon, ovarian, lung, and breast tissue